



APICAL INDUSTRIES, INC.  
dba DART AEROSPACE

ENGINEERING CHANGE NOTICE NO.

05405

SHEET 1 OF 1

DWG NO. 647.7800

REV: A

PREPARED BY J. BECKER

DATE: 05/20/16

EFFECT ON DWG  
☐ INC. ☒ UNINC.

DWG TITLE: BRACKET

APPROVED BY: ENGR

MFG

QC

EFF. CURRENT ORDER

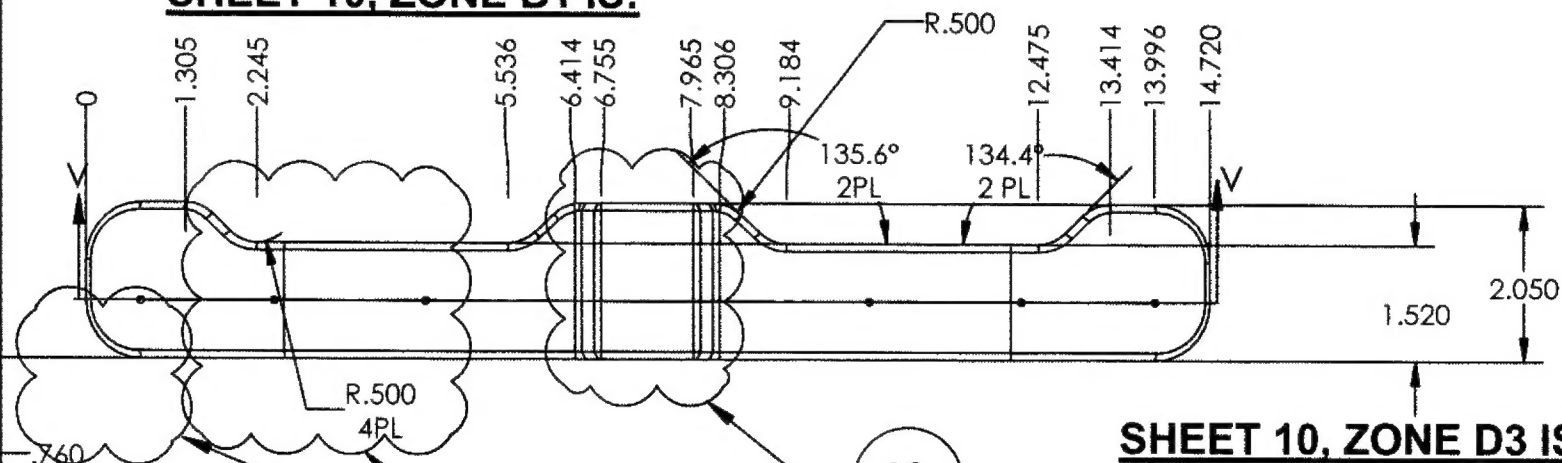
TRANSACTION CODES (TC):  
A-ADD C-CREATE  
R-REVISE D-DELETE

REASON: REVISED FINISH. ADDED DIMENSIONS ON SHEET 10.

ECR:  
N/A

ACTION ITEM:  
1.

### SHEET 10, ZONE B1 IS:

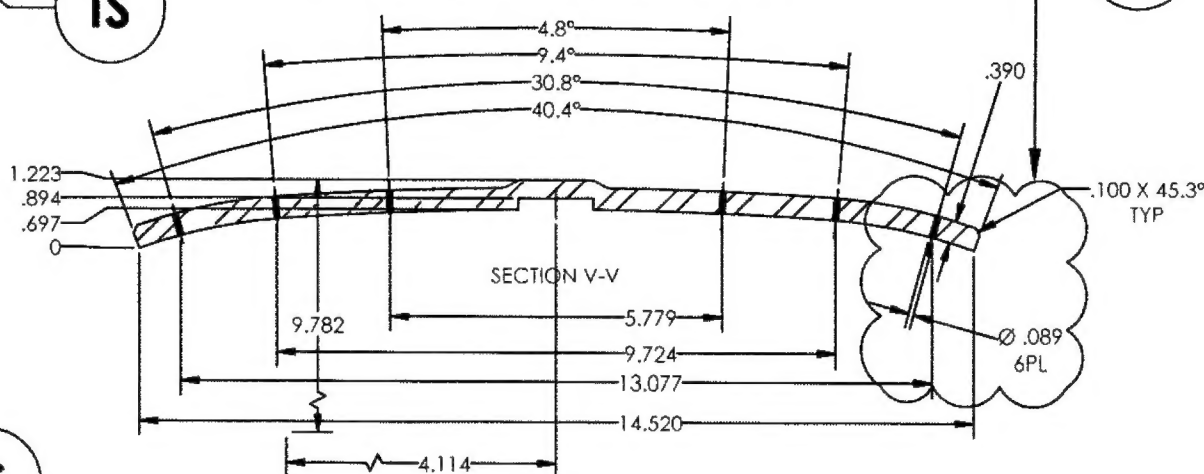


### SHEET 1, NOTE 2 IS:

#### NOTES:

1. MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12
2. FINISH IAW MPP-172 SECTION 2.1, 3.3 & 4.3.
3. DEBURR AND BREAK ALL SHARP EDGES
4. IDENTIFY IAW MPP-120

### SHEET 10, ZONE D3 IS:



DOCUMENTS EFFECTED:

☐ PATTERN ☐ MDL ☐ INSTALL INSTRUCTIONS ☐ ICA ☐ FMS ☐ BOM

CHANGE CATEGORY

☐ MAJOR ☒ MINOR

DER REVIEW REQUIRED

☐ YES ☒ NO



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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
	LAST PROTOTYPE RELEASE: PR2		NC
NC	INITIAL RELEASE	12-21-09	P. BRAVO
A	INCORPORATED ECN 03126, 04487, & 05328	03-02-16	P. BRAVO

NOTES:

- 1 MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12
- 2 FINISH IAW MPP-172 SECTION 3.3 & 4.3.
3. DEBURR AND BREAK ALL SHARP EDGES
4. IDENTIFY IAW MPP-120

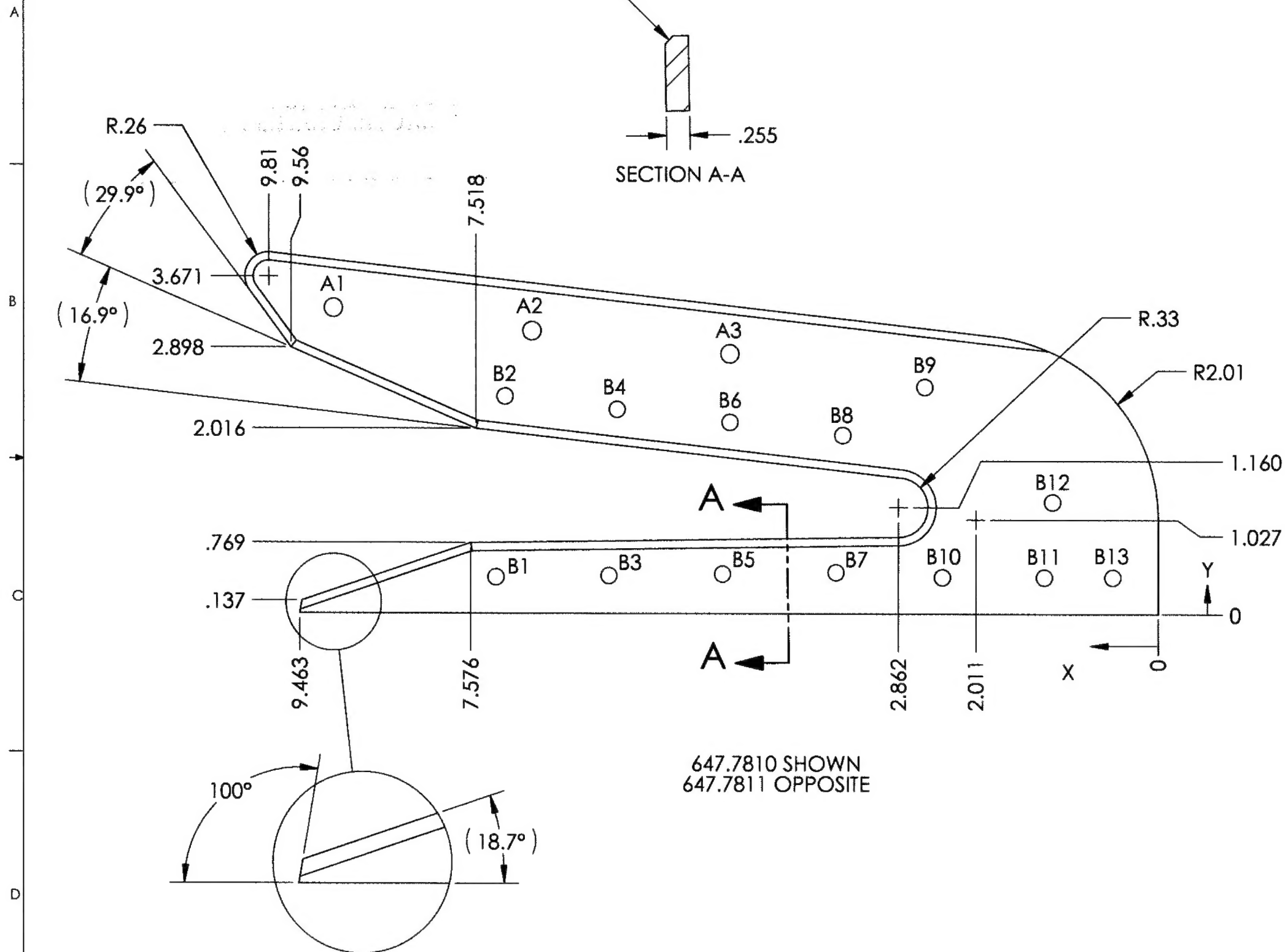
UNINCORPORATED ECN(s)

05405

		647.7823	CROSS BRACKET AFT	1	2
		647.7822	EYE BOLT FITTING RH	1	2
		647.7821	EYE BOLT FITTING LH	1	2
		647.7820	CROSS BRACKET AFT	1	2
		647.7819	CROSS BRACKET FWD	1	2
		647.7818	MOUNTING CHANNEL	1	2
		647.7817	AFT BRACKET	1	2
		647.7816	AFT BRACKET	1	2
		647.7815	FORWARD BRACKET	1	2
		647.7814	FORWARD BRACKET	1	2
		647.7813	CENTER PLATE LOWER	1	2
		647.7812	CENTER PLATE UPPER	1	2
		647.7811	BRACKET B	1	2
		647.7810	BRACKET A	1	2
	F/N	PART #	DESCRIPTION	MAT'L	SPEC

QTY	PARTS LIST				
NEXT ASSY (S)	ORIGINAL DATE (MO-DA-YR) 11-05-09	<div><div><div>DART</div><div>AEROSPACE</div><div>APICAL INDUSTRIES, INC. dba DART AEROSPACE</div></div><div>3030 ENTERPRISE CT., SUITE A VISTA, CA. 92081 (760)-724-5300</div></div>			
647.7300	DRAWN BY E. ANDERSSON				
	CHECKER P. BRAVO				
	DRAWING APPROVAL P. BRAVO 12-21-09				
	CONTRACT No.				
	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°	BRACKET			
		SHEET B	CAGE CODE 07MZ6	DWG. NO. 647.7800	REV. A
		SCALE NONE	SHEET 1 OF 10		

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647.7810  
647.7811 OPPOSITE

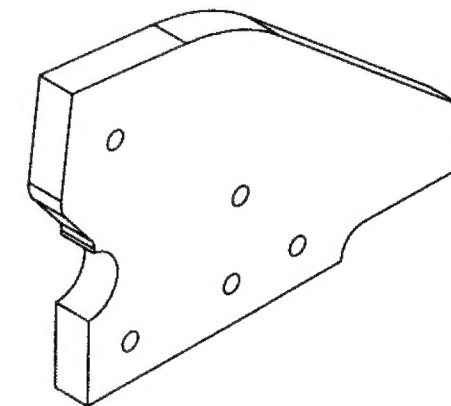
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A3	4.720	2.835±.002	Ø.201 THRU
B1	7.300±.002	.397±.002	Ø.177 THRU
B2	7.203±.002	2.369±.002	Ø.177 THRU
B3	6.050±.002	.415±.002	Ø.177 THRU
B4	5.961±.002	2.228±.002	Ø.177 THRU
B5	4.800±.002	.433±.002	Ø.177 THRU
B6	4.719±.002	2.088±.002	Ø.177 THRU
B7	3.550	.450	Ø.177 THRU
B8	3.476	1.947	Ø.177 THRU
B9	2.575	2.475	Ø.177 THRU
B10	2.380	.400	Ø.177 THRU
B11	1.250	.400	Ø.177 THRU
B12	1.160	1.220	Ø.177 THRU
B13	.500	.400	Ø.177 THRU

647.7810 SHOWN  
647.7811 OPPOSITE

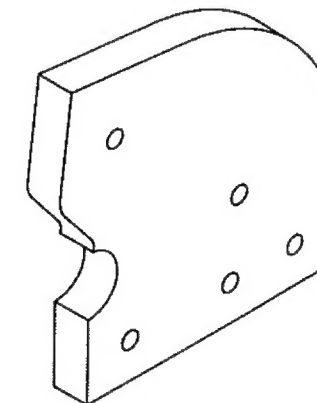
ORIGINAL DATE (MO-DA-YR) 11-05-09	<b>DART</b> 3030 ENTERPRISE CT., SUITE A VISTA, CA. 92081 (760)-724-5300		
DRAWN BY E. ANDERSSON	CHECKER P. BRAVO	APICAL INDUSTRIES, INC. dba DART AEROSPACE	
DRAWING APPROVAL P. BRAVO 12-21-09		CONTRACT No.	
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		BRACKET	
SIZE B	CAGE CODE 07MZ6	DWG. NO. 647.7800	REV. A
SCALE NONE		SHEET 2 OF 10	

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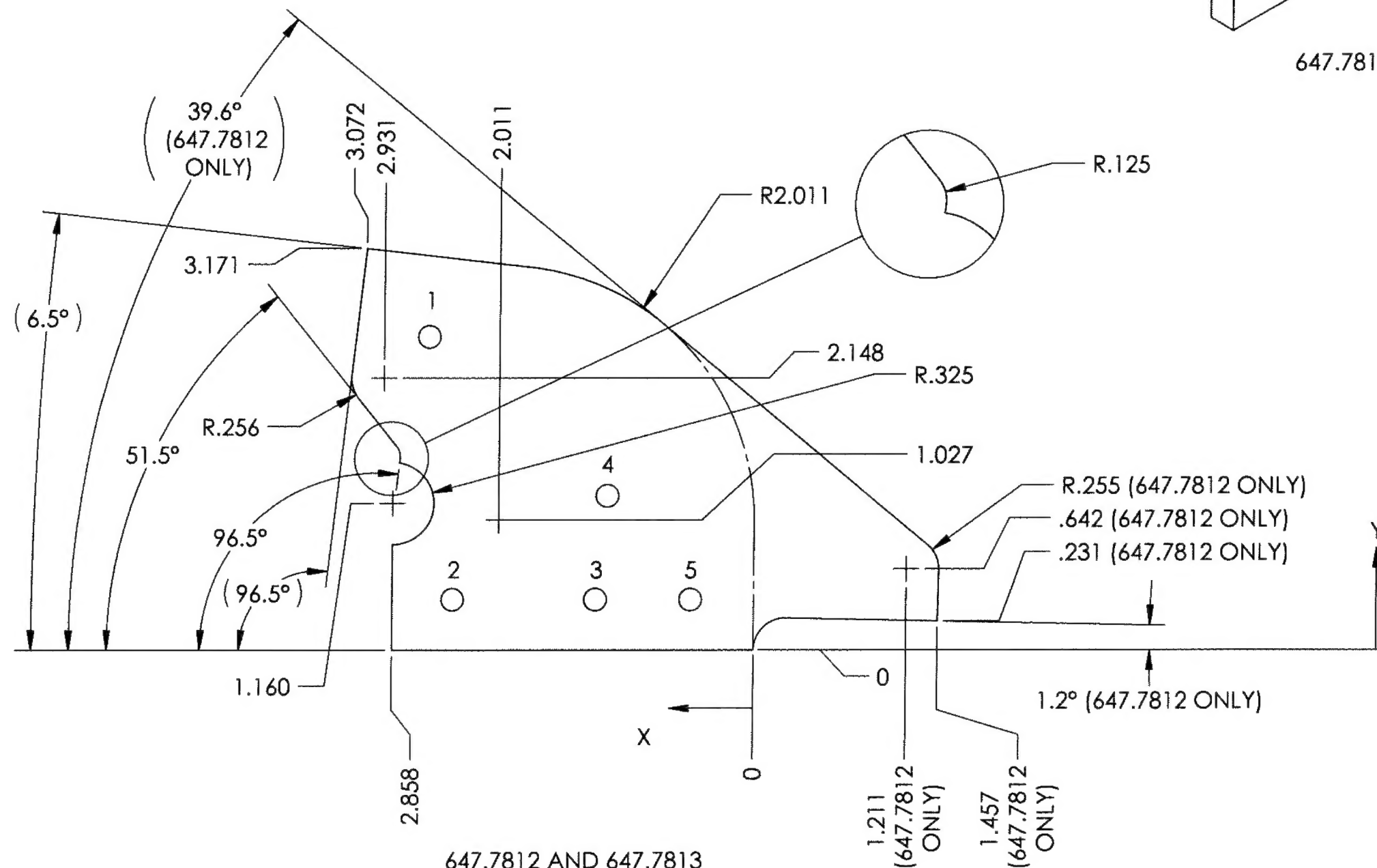
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2	2.380±.002	.400±.002	Ø.177 THRU
3	1.250±.002	.400±.002	Ø.177 THRU
4	1.160±.002	1.220±.002	Ø.177 THRU
5	.500±.002	.400±.002	Ø.177 THRU



647.7812



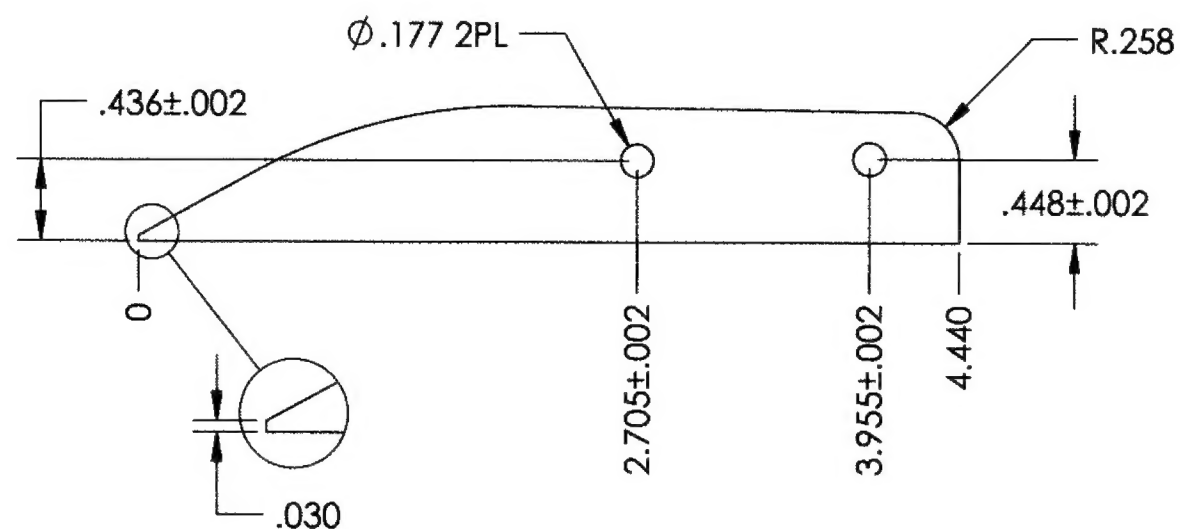
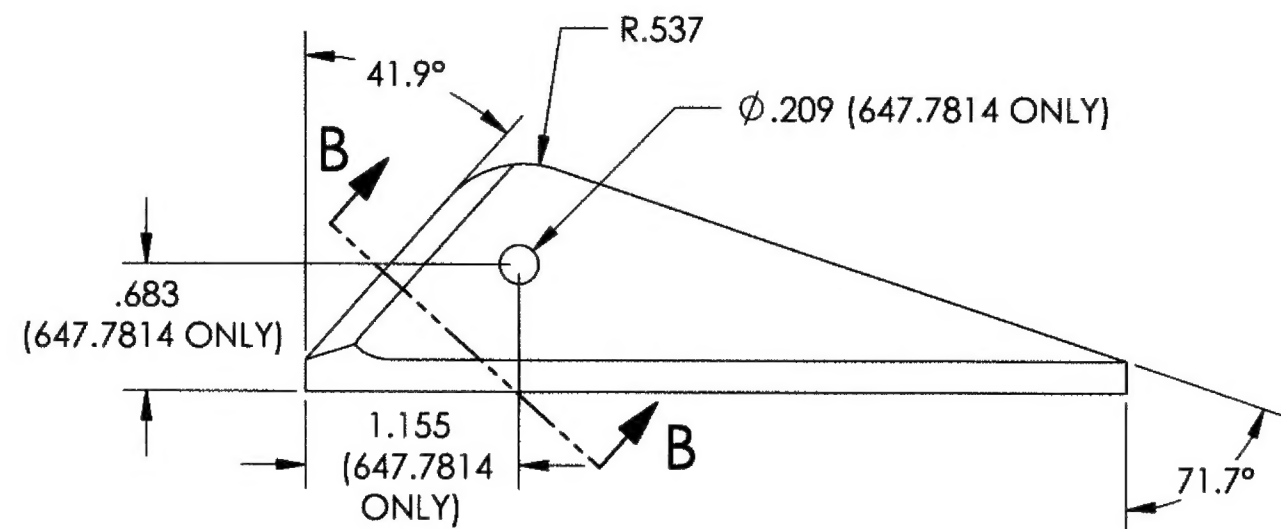
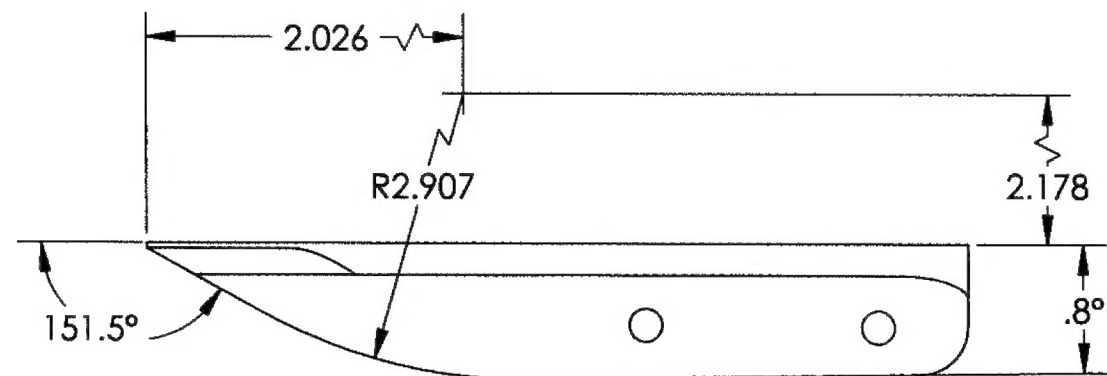
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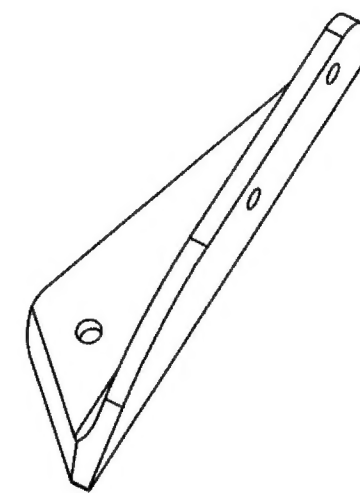
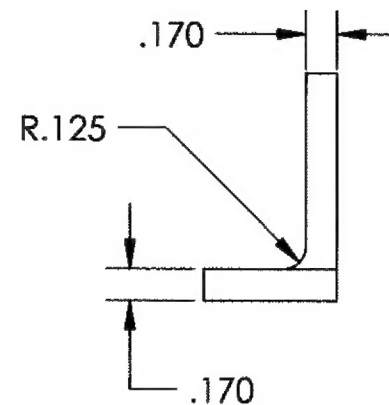
647.7812 AND 647.7813

ORIGINAL DATE (MO-DA-YR) 11-05-09		3030 ENTERPRISE CT., SUITE A	
DRAWN BY E. ANDERSSON		VISTA, CA. 92081	
CHECKER P. BRAVO		(760)-724-5300	
DRAWING APPROVAL P. BRAVO 12-21-09		APICAL INDUSTRIES, INC. dba DART AEROSPACE	
CONTRACT No.		BRACKET	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°	SEE B	CAGE CODE 07M26	DWG. NO. 647.7800
	SCALE NONE	REV. A	SHEET 3 OF 10

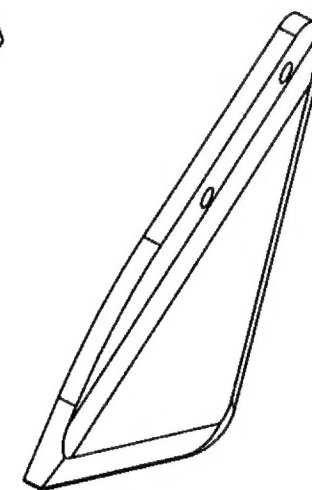
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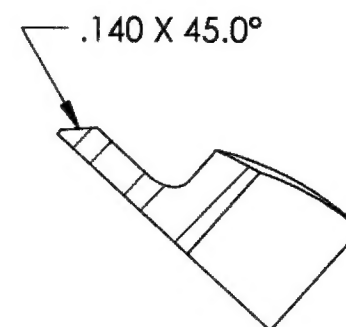
647.7814 SHOWN  
647.7815 OPPOSITE



647.7814



647.7815

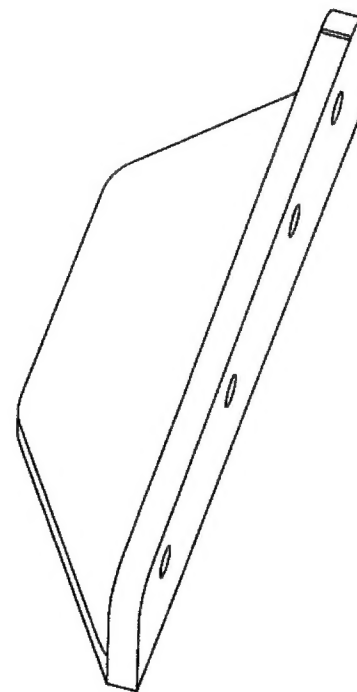
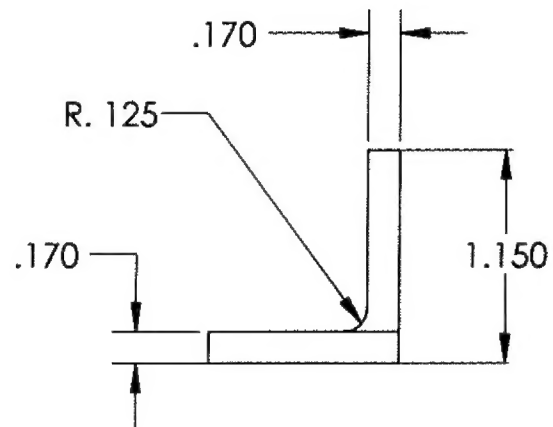
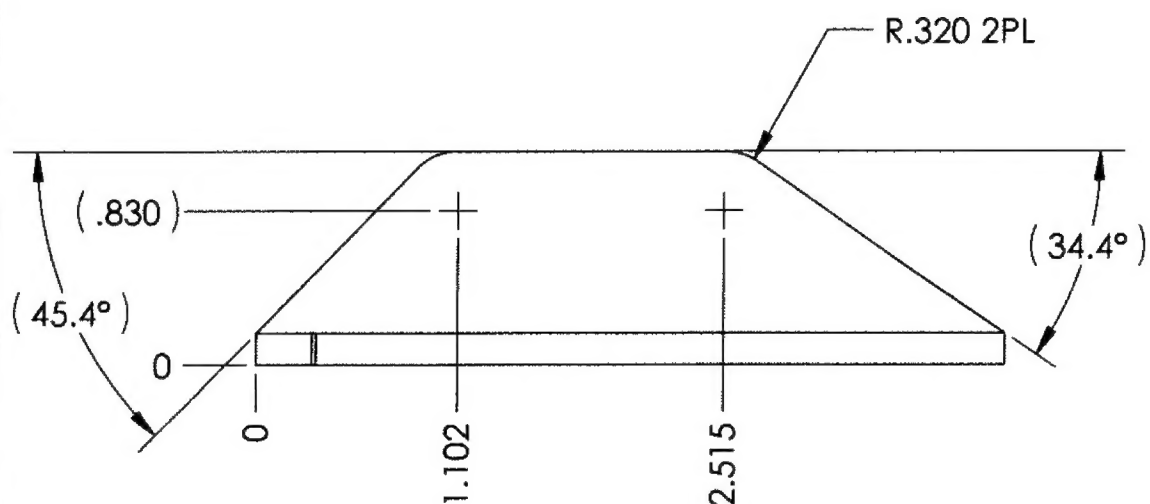
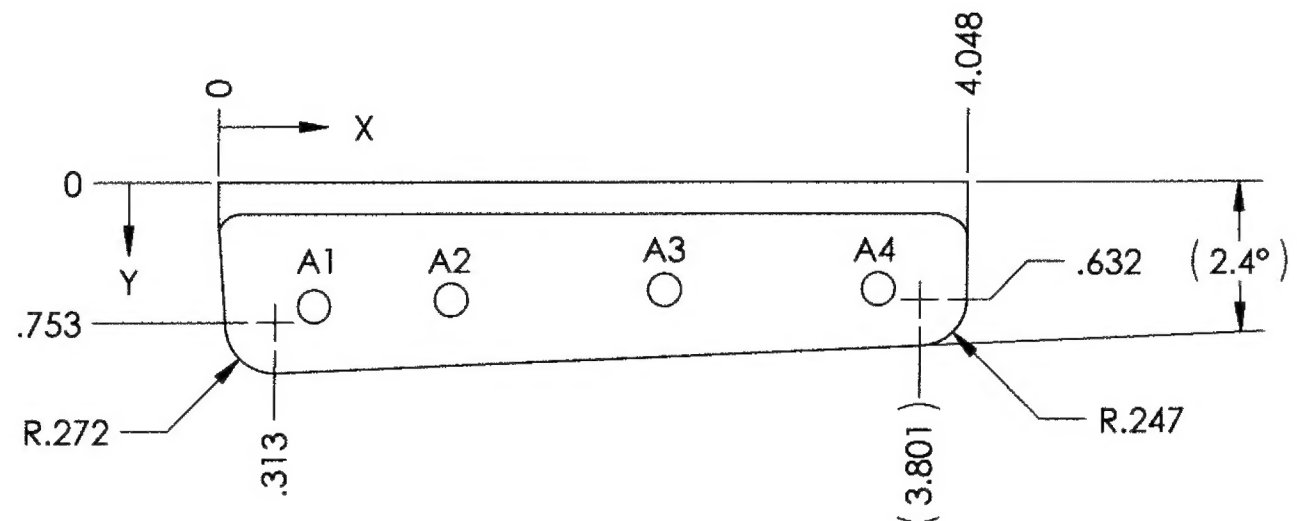


SECTION B-B

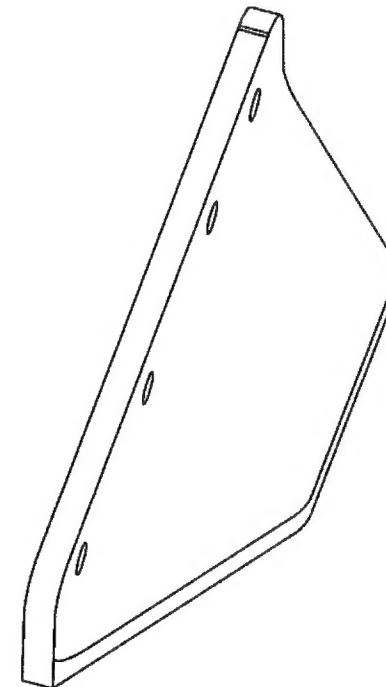
ORIGINAL DATE (MO-DA-YR) 11-05-09		<b>DART</b> 3030 ENTERPRISE CT., SUITE A VISTA, CA. 92081 (760)-724-5300 APICAL INDUSTRIES, INC. dba DART AEROSPACE	
DRAWN BY E. ANDERSSON	CHECKER P. BRAVO		
DRAWING APPROVAL P. BRAVO 12-21-09		BRACKET	
CONTRACT No.		SCALE NONE	SHEET 4 OF 10
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		SEE B	REV. A
		CAGE CODE 07MZ6	DWG. NO. 647.7800

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TAG	X LOC	Y LOC	SIZE
A1	.527±.002	.666±.002	Ø.177 THRU
A2	1.276±.002	.631±.002	Ø.177 THRU
A3	2.404±.002	.578±.002	Ø.177 THRU
A4	3.576±.002	.573±.002	Ø.177 THRU



647.7816

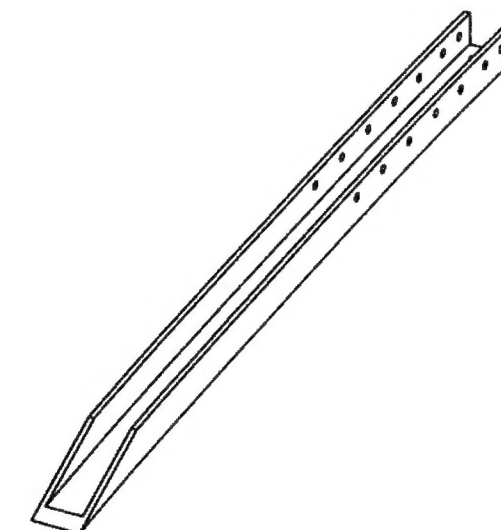
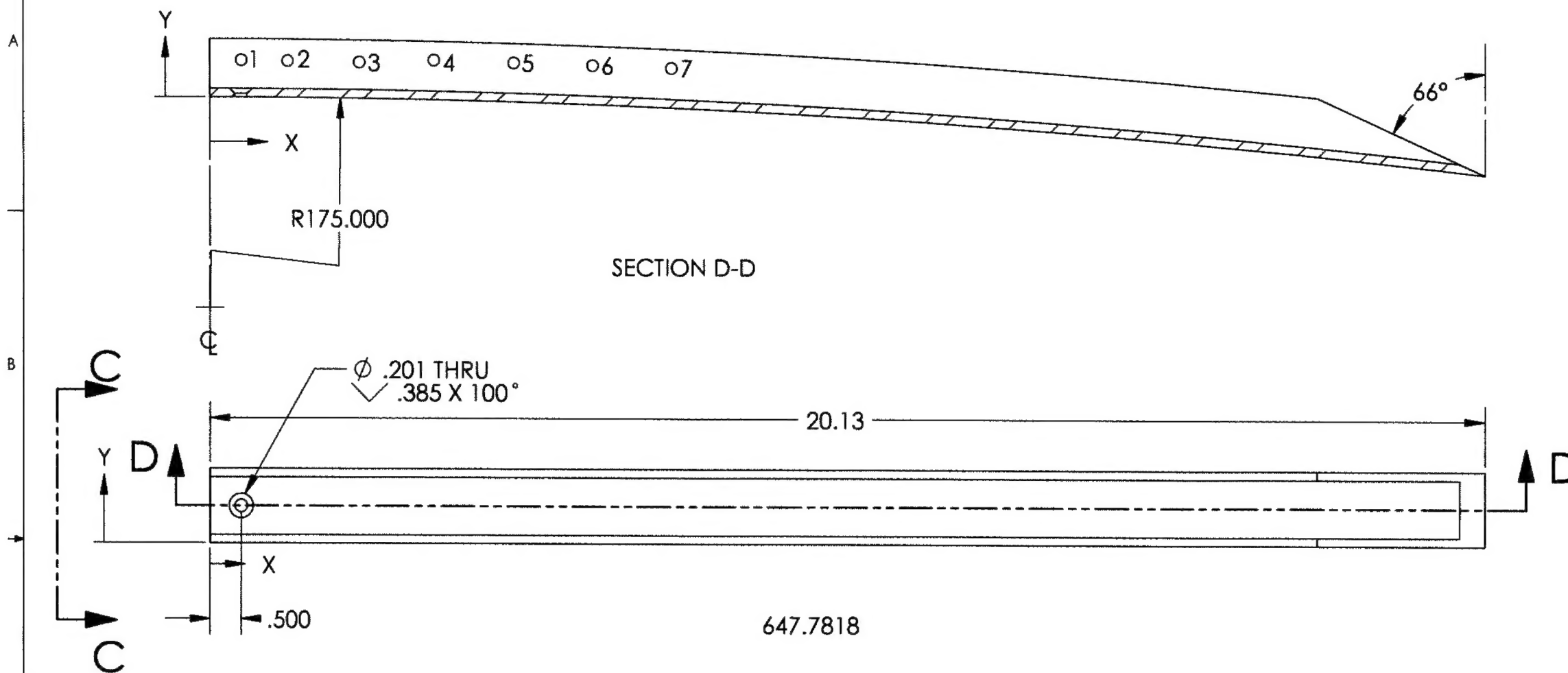


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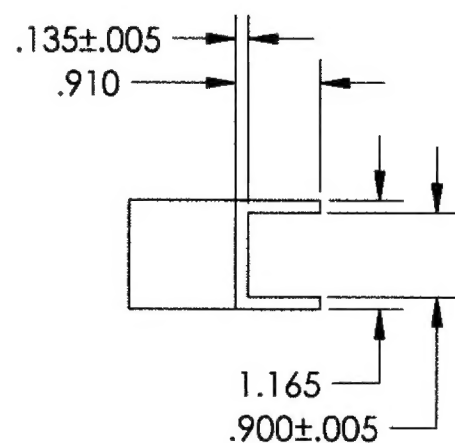
647.7816 SHOWN  
647.7817 OPPOSITE

ORIGINAL DATE (MO-DA-YR) 11-05-09		<b>DART</b> 3030 ENTERPRISE CT., SUITE A VISTA, CA. 92081 (760)-724-5300	
DRAWN BY E. ANDERSSON		CHECKER P. BRAVO	
DRAWING APPROVAL P. BRAVO 12-21-09		APICAL INDUSTRIES, INC. dba DART AEROSPACE	
CONTRACT No.		BRACKET	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		SIZE B	REV. A
CAGE CODE 07MZ6		DWG. NO. 647.7800	SHEET 5 OF 10
SCALE NONE			

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647.7818

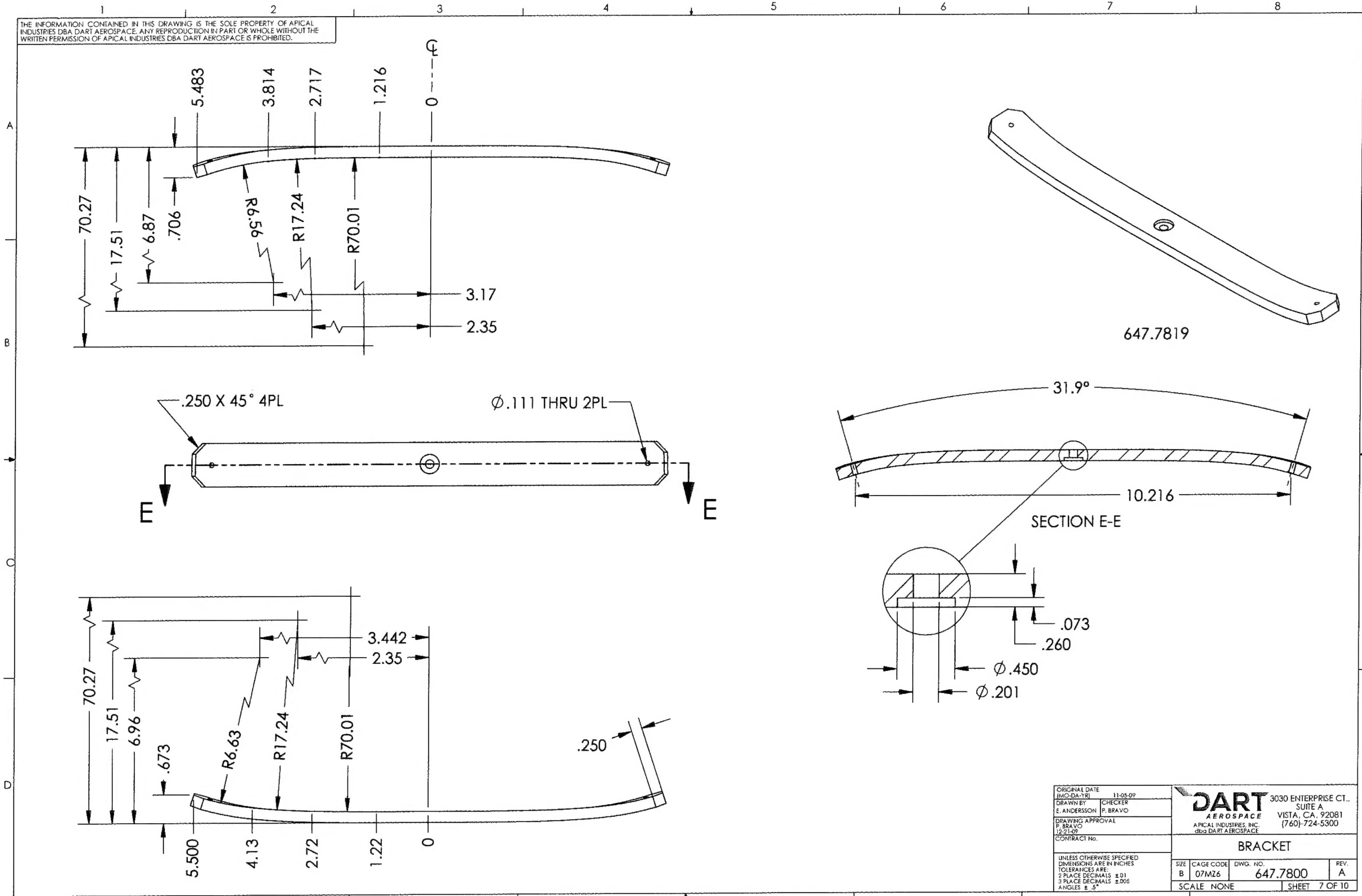



TAG	X LOC	Y LOC	SIZE
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3	2.386±.002	.549±.002	Ø .177 THRU
4	3.557±.002	.581±.002	Ø .177 THRU
5	4.806±.002	.544±.002	Ø .177 THRU
6	6.055±.002	.507±.002	Ø .177 THRU
7	7.305±.002	.470±.002	Ø .177 THRU

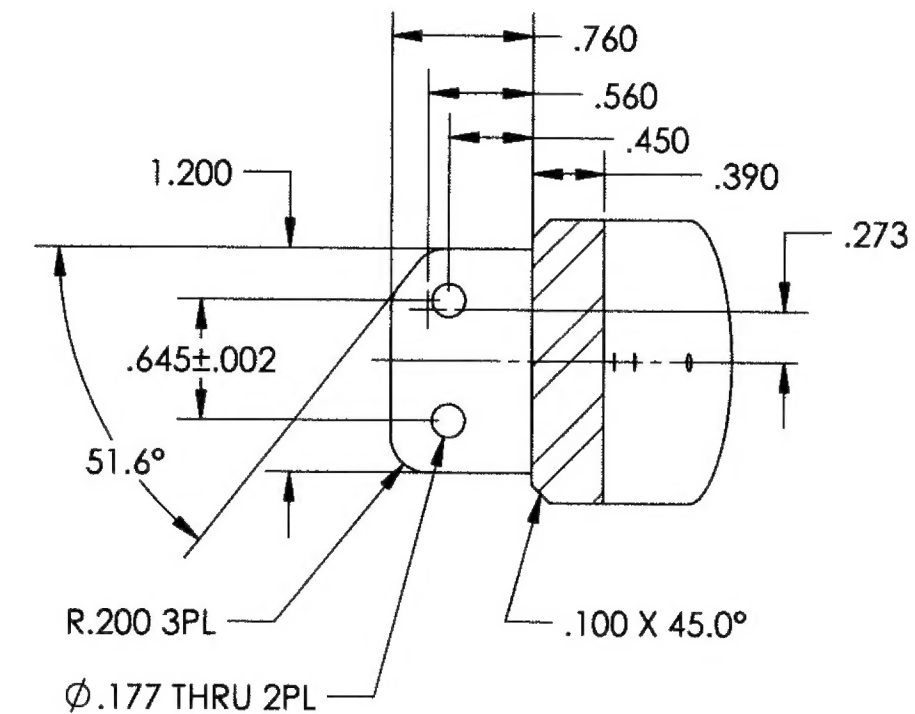
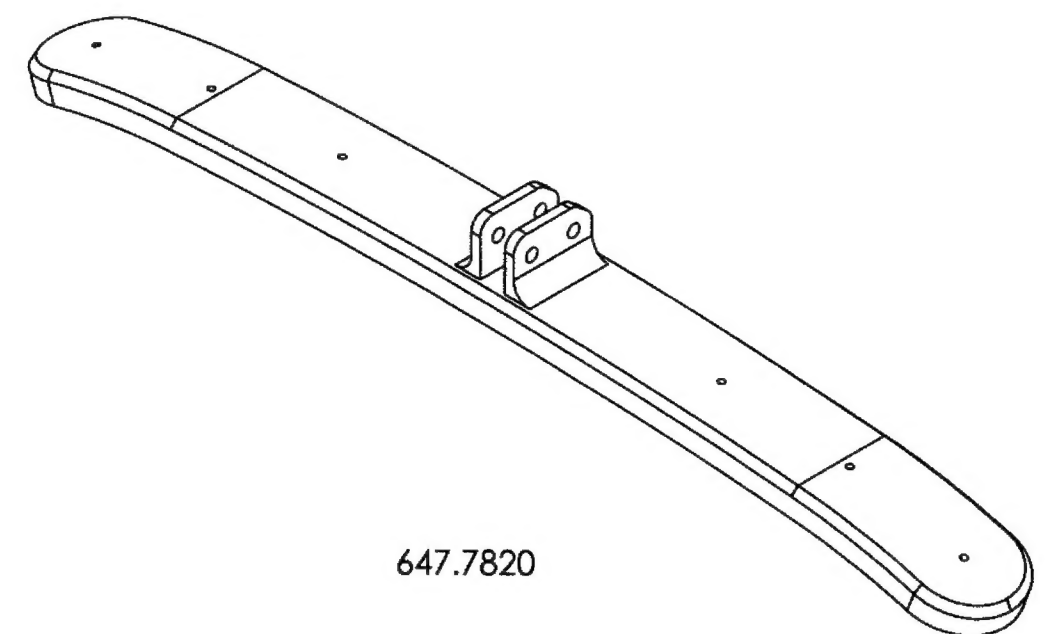
ORIGINAL DATE (MO-DA-YR) 11-05-09		3030 ENTERPRISE CT., SUITE A VISTA, CA. 92081 (760)-724-5300	
DRAWN BY E. ANDERSSON		CHECKER P. BRAVO	
DRAWING APPROVAL P. BRAVO 12-21-09		APICAL INDUSTRIES, INC. dba DART AEROSPACE	
CONTRACT No.		BRACKET	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		SIZE B	CAGE CODE 07MZ6
		DWG. NO. 647.7800	REV. A
		SCALE NONE	SHEET 6 OF 10



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ORIGINAL DATE (MO-DA-YR) 11-05-09		 <b>DART</b> AEROSPACE APICAL INDUSTRIES, INC. dba DART AEROSPACE		3030 ENTERPRISE CT., SUITE A VISTA, CA, 92081 (760)-724-5300	
DRAWN BY E. ANDERSSON	CHECKER P. BRAVO				
DRAWING APPROVAL P. BRAVO 12-21-09					
CONTRACT No.		<b>BRACKET</b>			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°					
SIZE B	CAGE CODE 07M26	DWG. NO. 647.7800	REV. A		
SCALE NONE			SHEET 7 OF 10		



SECTION F-F

ORIGINAL DATE (MO, DA, YR)	11-05-09		
DRAWN BY	CHECKED		
E. ANDERSSON	P. BRAVO		
DRAWING APPROVAL			
P. BRAVO			
12-21-09			
CONTRACT NO.			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.001 3 PLACE DECIMALS ±.005 ANGLES ± .5°			



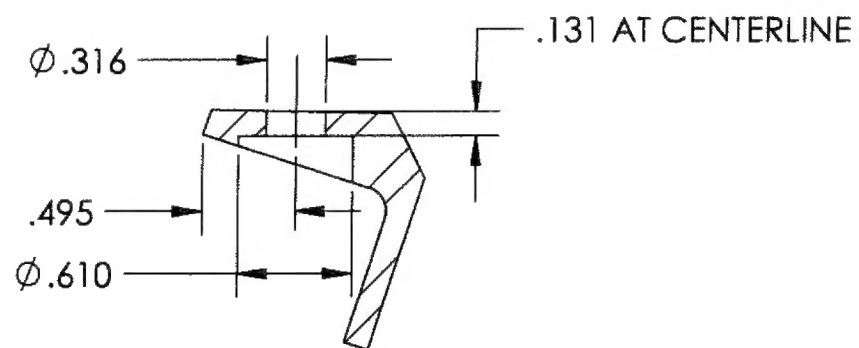
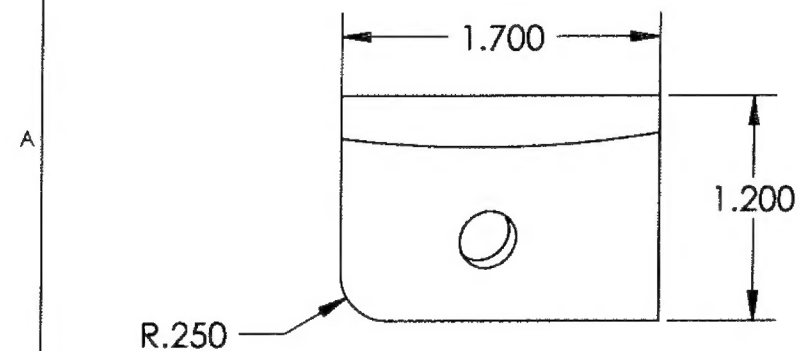
**DART**  
AEROSPACE  
APICAL INDUSTRIES, INC.  
dba DART AEROSPACE

3030 ENTERPRISE CT.  
SUITE A  
VISTA, CA. 92081  
(760)-724-5300

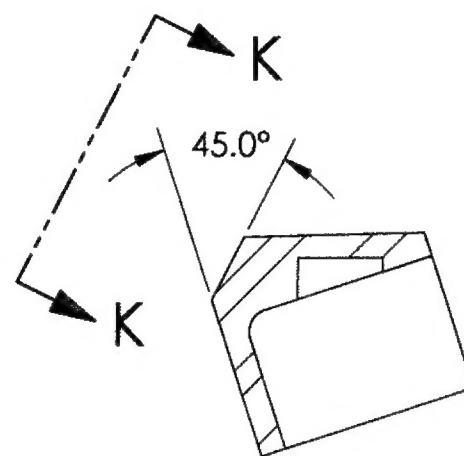
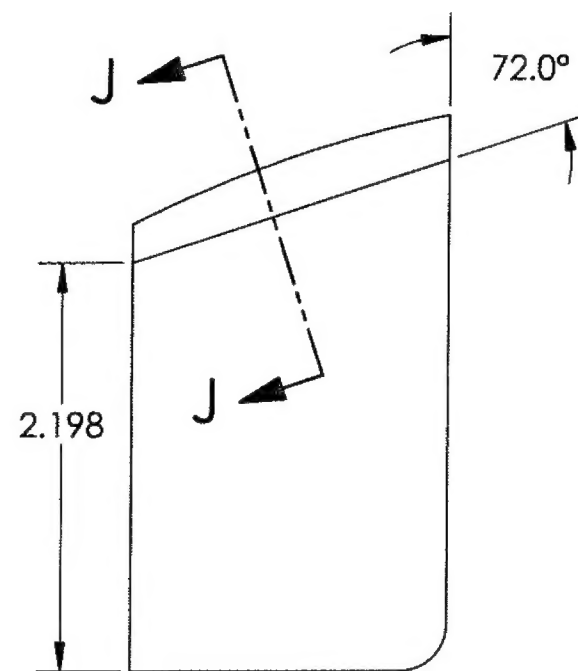
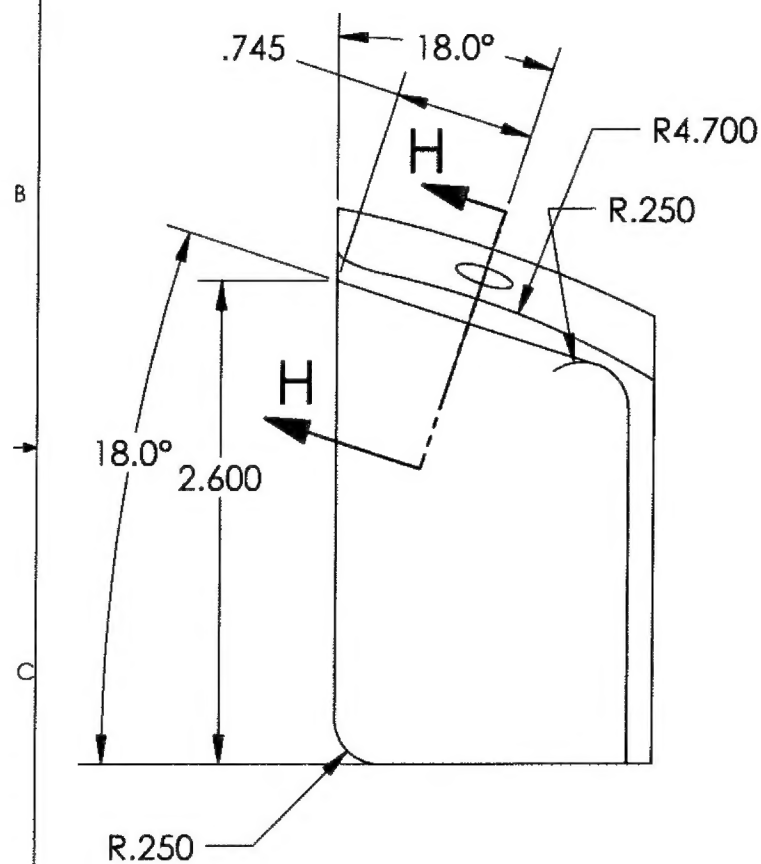
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SIZE	CAGE CODE	DWG. NO.	REV.
B	07MZ6	647.7800	A
SCALE NONE		SHEET	8 OF 10

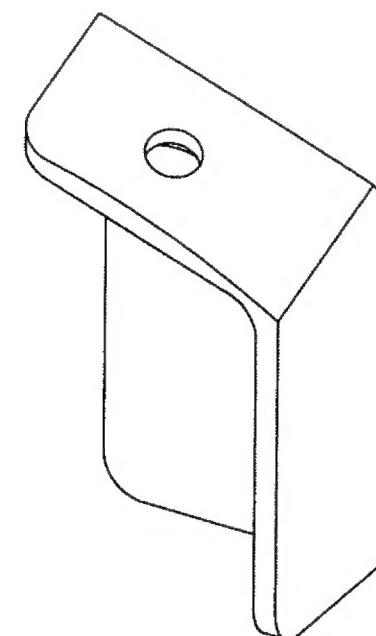
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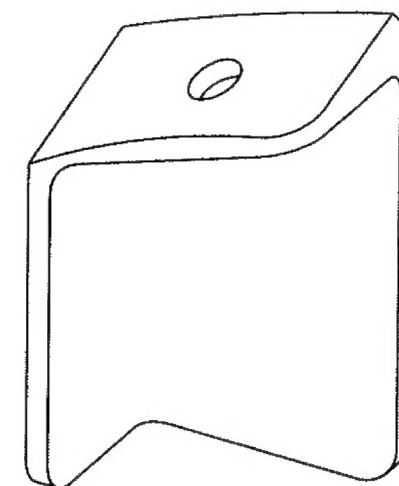
SECTION H-H



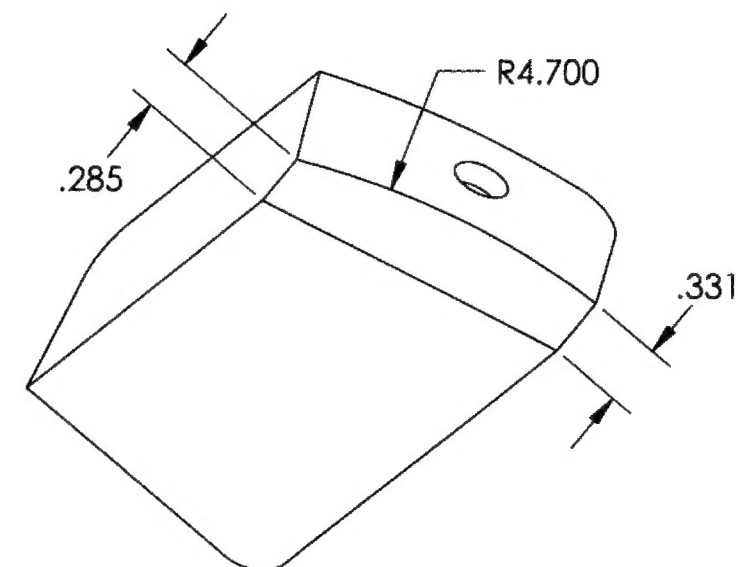
SECTION J-J



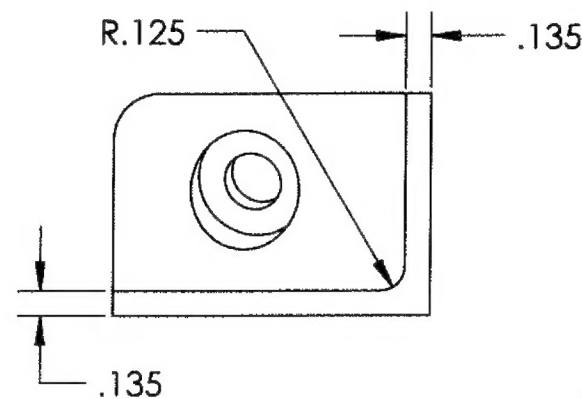
647.7821



647.7822



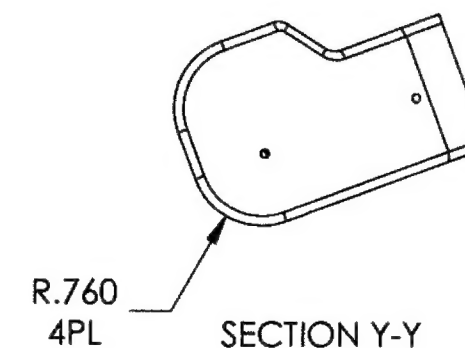
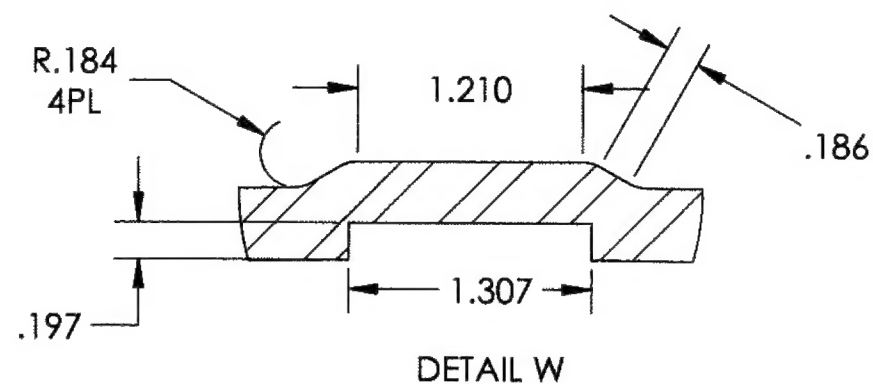
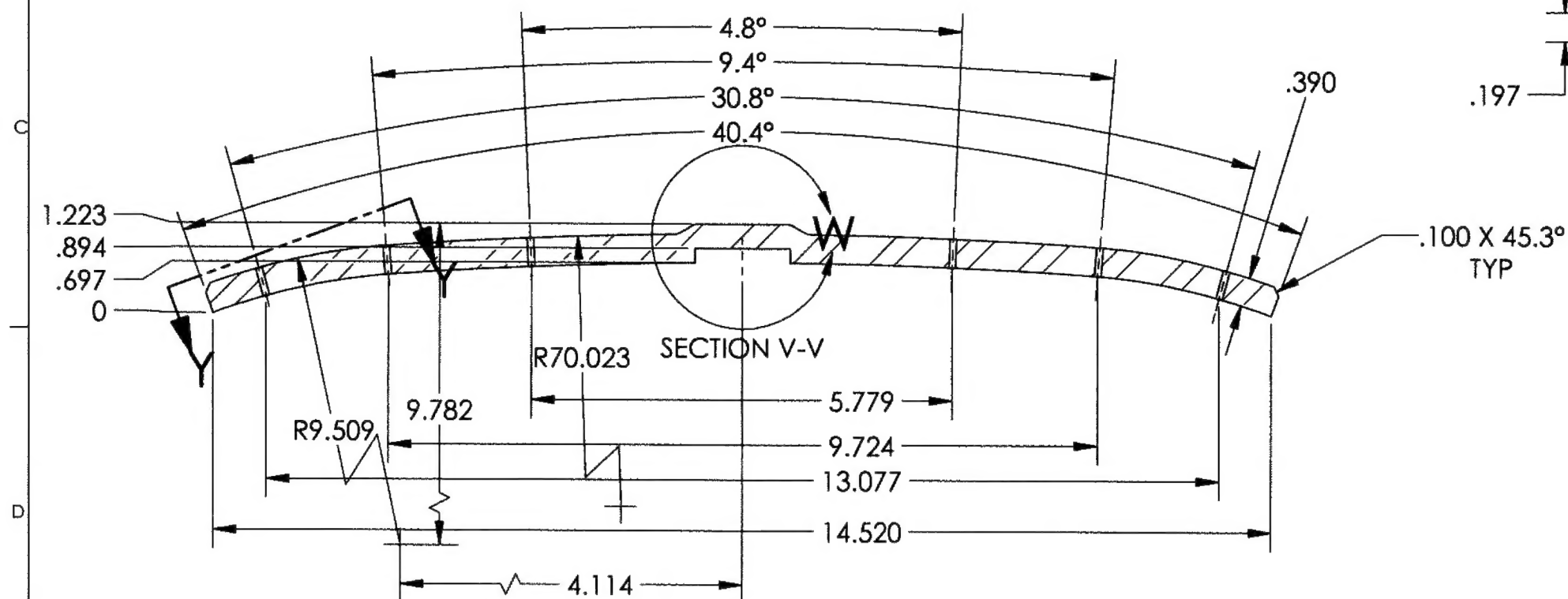
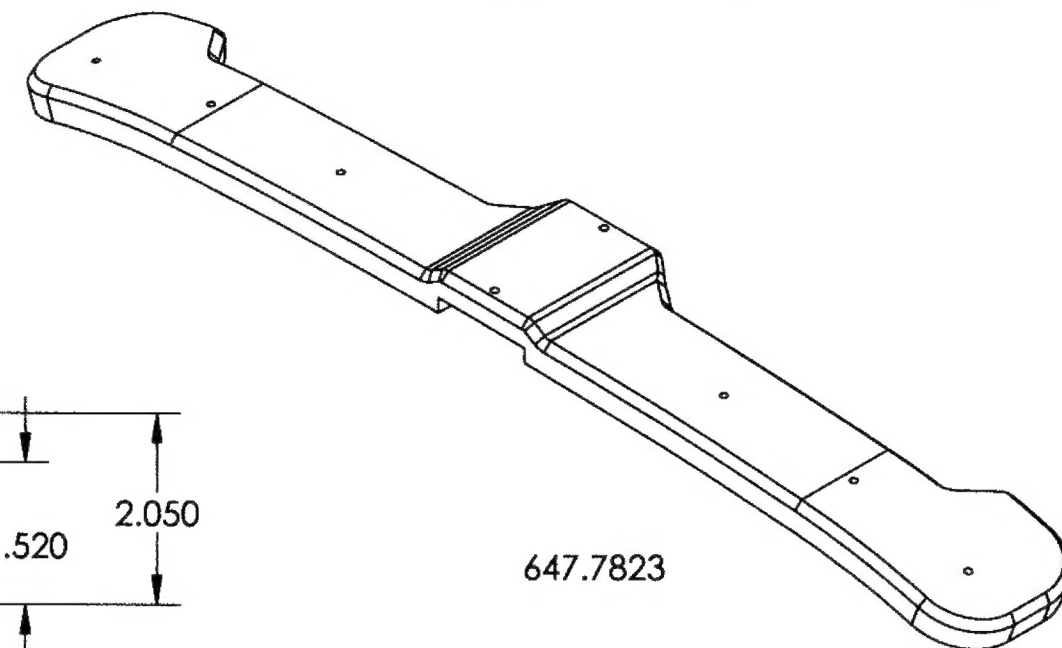
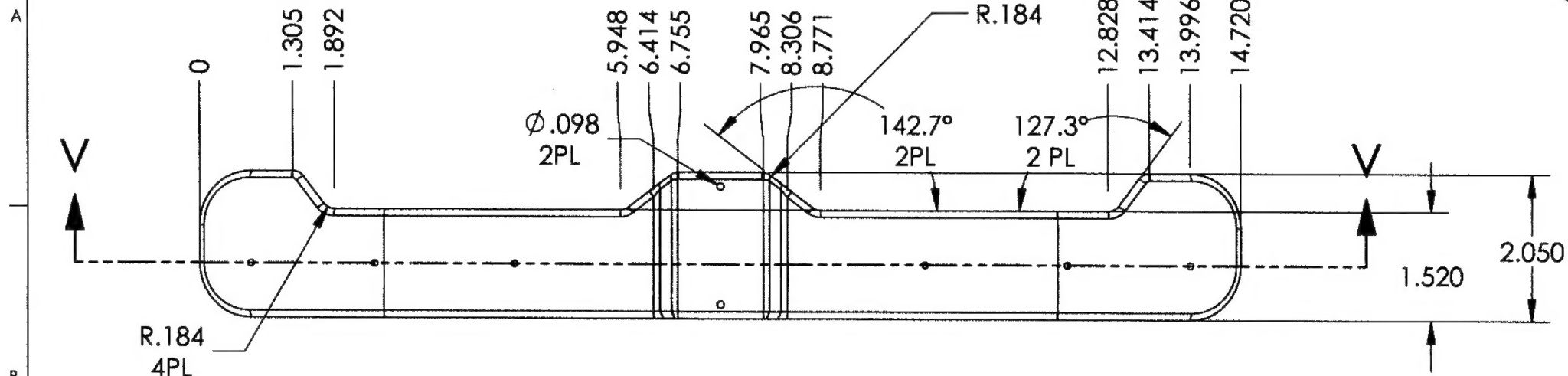
SECTION K-K



647.7821 SHOWN  
647.7822 OPPOSITE

ORIGINAL DATE (MO-DA-YR) 11-05-09		<b>DART</b> 3030 ENTERPRISE CT., SUITE A <b>AEROSPACE</b> VISTA, CA. 92081 APICAL INDUSTRIES, INC. (760)-724-5300 dba DART AEROSPACE	
DRAWN BY E. ANDERSSON	CHECKER P. BRAVO		
DRAWING APPROVAL P. BRAVO 12-21-09		BRACKET	
CONTRACT No.		SIZE B	REV. A
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		CAGE CODE 07M26	DWG. NO. 647.7800
		SCALE NONE	SHEET 9 OF 10

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ORIGINAL DATE (MO-DA-YR) 11-05-09		<b>DART</b> 3030 ENTERPRISE CT., SUITE A VISTA, CA. 92081 (760)-724-5300 APICAL INDUSTRIES, INC. dba DART AEROSPACE	
DRAWN BY E. ANDERSSON	CHECKER P. BRAVO		
DRAWING APPROVAL P. BRAVO 12-21-09		BRACKET	
CONTRACT No.		SIZE B	REV. A
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		CAGE CODE 07MZ6	DWG. NO. 647.7800
		SCALE NONE	SHEET 10 OF 10